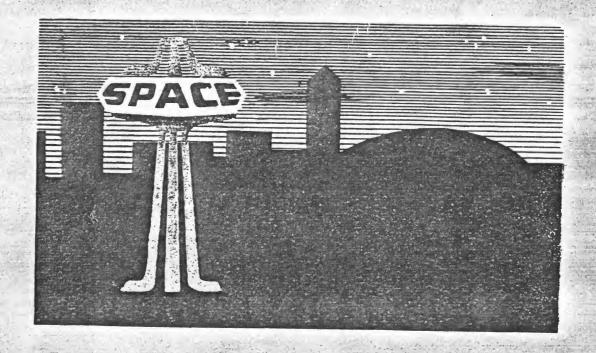
MESSAGES FROM

VOLUME 2 ISSUE 12 CARRY DECEMBER 1982

CALL TO ASSEMBLY PT. 3



BYLAWS

GAME: PIAZZA

MURPHY'S LAW - CONTROL CODE LISTER

From The Editor's Atari

Well, I' not sure, but I think that this is the next to last newsletter I'll be putting out. Kathy Bergh will be taking over, (at least I hope so) and the newsletter will once again need lots of support from you the readers, and users. I'll be helping Kathy, and the January issue will be a combined opus.

Of course, the January meeting will be held on January 8, at Creative Computing, as no one in their right minds will be wanting to attend a computer meeting on New Years Day! The business meeting will be at 4 pm at Burger Kitchen prior to the meeting, and of course, you are all welcome to attend and put in your input. (Redundant? Probably.)

The main thing of interest we're working on right now is the Second Northwest Atari Computer Conference to be held the last weekend in March. Much work remains to be done on this project, but it should be absolutely and thoroughly super-enjoyable.

The new Atari Computer should be released shortly. Word is that it is called the LX 1200. And prices on the 800 are supposed to topple.

Well Emerald City Computer is moving to Seattle, and Dick, my partner, is decreasing emphasis bn Atari and Atari-related items. Why do I bring this up? Because the S*P*A*C*E BBS is going to be looking for a new home. In fact we have to decide if we wish to continue this function, as the hardware and phone line have been provided gratis through Emerald City. Unfortunately, I can't pick up the rent on the store locale at this time, and although Dick would be more than happy to transfer the phone-line to S*P*A*C*E, how would we go about this? Oh well, something more to discuss, at the next meeting...
JW...

6:00 PM

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WEST MEEKER

LEFT MOEK MALL

CREATIVE COMPUTERS

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Messages from SxFxAxCxE

Volume 2 Number 12 December 1982

Volume Table of Contents

Messages from S*P*A*C*E is the official newsletter of the Seattle Puget/sound Atari Computer Enthusiasts and is published 12 times per year. S*P*A*C*E is no affiliated with ATARI. A subscription to MFS is part of the benefits of membership in S*P*A*C*E. Dues are \$12.00 per year.

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CALL TO ASSEMBLY

by Tom Newman

MICRO-PAINTER article, part three: "The uncompactor"

In part two of this article we created a disk file containing the compacted data of our MICRO-PAINTER picture. This article will show you how to load the compacted file back into RAM, using a portion of the progRAM from the first part of the article. We will also have to create a mode 'E' display list so we can view our picture as the program unfolds it. Again we will use a portion of the first program. Keep in mind that the screen memory and mode 'E' display list is a necessary overhead in displaying pictures created by MICRO-PAINTER.

One of the possible uses of this program, is to store several pictures in RAM, and then unfold them one at a time into a common screen RAM area. Such as a tutorial, where a series of complex, rapidly available, pictures would be desireable to clarify a point. My sons, of course, have a different intrest in the advantages of the compactor program. It lets them get all four of the DONKEY KONG screens into the computer's memory at the same time, which furthers their hopes that I will put some action into the pictures they have so artfully created.

In using the MICRO-PAINTER pictures in a game, I would suggest that you start by choosing one with a large static playfield. Then use players for the moveable objects. There are collision detection registers built into the ATARI hardware, which can detect contact between the players and the playfield, or each other. The use of these registers is outlined in ATARI'S hardware manual(CO16555). To get an idea of what can be done with bit mapped graphics, take a look at ERODERBUND'S CHOPLIFTER for an outstanding example. That is the type of thing which could be accomplished with these pictures, not with as much resolution, but the same type of action and much more control over the colors.

At this point I will leave the possibilities up to your imagination and get down to an explanation of the un-compaction program.

Lines 130 to 230 contain the equate table. If you are using the ATARI ASSEMBLER/ EDITOR cartridge use zero page locations \$80 to \$88

insted of \$F0 to \$F8. Each assembler (hopefully) will have some zero page locations set aside for your use. The exact locations vary from one assembler to another, so be certain the locations you use are free, or you may discover the gates to never never land.

Lines 270 to 380 initilize the program variables, like where to put the un-compacted data and where to get it.

Lines 420 to 800 contain the program body. First we get a byte from the data table we created in the last article. The table is indexed by the 'Y' register to first point to the data byte and then the repeats byte. The actual movement through the table however is accomplished by altering the zero-page pointer 'TABLE', and then reseting the 'Y' register to zero upon each access to the table. I also have used the 'Y' index register to keep track of which column is being put to the screen. The column number is saved in a temporary location called 'SAVEY', while the data table is being accessed.

In the mode 'E' standard width screen there are forty bytes per line. In order to put one byte directly under another in the screen ram, to create the columns, we must add forty (HEX 28) to the previous address. This is accomplished in lines 580 to 640. If the end of the column has been reached then the buffer is restored to its starting value, and the 'Y' register incremented. When all of the columns are transfered then the program is exited.

Now it is time to take a look at your picture. To do that you must have the mode 'E' display list in memory, and point the display list pointer at the new list. Use lines 530 through 980 of the program on page 9 of the November newsletter to accomplish this. Assemble the program to disk (.TF "D:YOURFILE), so that you may use it later. Now assemble the program in this article into RAM.(DON'T FORGET TO SAVE IT). BLOAD the compacted file you created from the last article, and the display list setup mentioned above. To execute the program type MON then 5F00G (THE SCREEN WILL GO BLANK), listen for the bell! Carefully type 5E00G and your picture should appear on the screen.

Good luck.

T.E.N.

PROGRAM LISTING

00010	·LI OFF
00020	.OR \$5E00

	* UN-COMPACTOR *
	* NEWS LETTER ARTICLE [PART3] *
	* BY TOM NEWMAN *
00070	

00090	

	* EQUATE TABLE *

	BUFFER .EQ \$F0
	BUFFLO .EQ \$F0
	BUFFHI .EQ \$F1
	TABLE .EQ \$F2
	TBLLO .EQ \$F2
	TBLHI .EQ \$F3
	SAVEY .EQ \$F4
	REPEATS .EQ \$F5
00210	HOMELO .EQ \$F6
00220	HOMEHI .EQ \$F7
00230	DATA .EQ \$F8
00240	**********
00250	* INITILIZATION *
00260	**********
00270	START LDA #\$50
00280	STA BUFFLO
00290	STA HOMELO
00300	LDA #\$61
00310	STA BUFFHI
00320	STA HOMEHI
00330	LDA #\$00
00340	STA TBLLO
00350	STA SAVEY
00360	LDA #\$40
00370	STA TBLHI
00380	LDX #\$CO

00400	

	CHANGE LDY #\$00
00430	
00440	
00450	
00460	
00470	·
00480	
00490	
00500	
00510	
00520	
00530	
00540	
	BLOCK LDY SAVEY
00000	DECOUR EDISAVEI

00560

LDA DATA

00570	STA (BUFFER),Y
00580	CLC
00590	LDA BUFFLO
00400	ADC #\$28
00610	STA BUFFLO
00620	LDA BUFFHI
00930	ADC #\$00
00640	
00650	
00990	BEQ NEXTCOLM
	REENTER INC REPEATS
08400	BNE BLOCK
00690	
	NEXTCOLM INC SAVEY
00/10	· CPY #\$27
00720	
00730	LDA HOMELO
00740	STA BUFFLO
00750	LDA HOMEHI
00760	STA BUFFHI
00770	LDX #\$CO
00780	JMP REENTER
00790	
00800	.END

Review!

DEFENDER \$44.95 16K Rom Cartridge ATARI



Reviewed by Jerry Wright

Well, its finally here! We've been waiting for months for the release of Defender, and I guess it was worth the wait. The graphics are hi-res for sure,

You are the pilot of the ship "DEFENDER" and your mission is to protect the humanoids from being captured and mutated by the evil aliens. The aliens have Landers, Swarmers, Baiters, Bombers, and the Horrible PODS. They'll blow you up by shooting you, landing on top of you, or setting space mines in your way.

You not only see the enemy on the screen in front of you, but you have a scanner which covers a much wider area and can tell you wich of your ten humanoids is in danger.

The action is fast and furious, and you have joystick control of your ship, as well as keyboard input allowing you to use "Smart Bombs" and "hyperspace".

The documentation is fun to read, and is even useful, with strategy hints that will improve your score,

So give Defender a try. It has worthwhile animation and is an almost exact duplication of the arcade game of the same name.

EYLAWS

by The Bylaws Committee

(These bylaws will be voted on during the January meeting, unless we hear strenuous objections, so read them please.)

November 30, 1982

SEATTLE / PUGET SOUND ATARI COMPUTER ENTHUSIASTS (S*P*A*C*E)

CONSTITUTION AND BYLAWS

CONSTITUTION

ARTICLE I - Name and Object

Section 1. The name of the club shall be the Seattle / Puget Sound Atari Computer Enthusiasts (S*P*A*C*E)

Section 2. The object of the club shall be to promote and support interest in Atari computers and programming.

Section 3. The club shall not be conducted or operated for profit and no part of any profits or remainder or residue from dues or donations to the club shall be used to the benefit of any member or individual.

Section 4. The members of the club shall adopt and may from time to time revise such bylaws as may be required to carry out this object.

BYLAWS

ARTICLE I - Membership

Section 1. Eligibility. There shall be one type of membership open to all persons who subscribe to the purpose of this club.

Section 2. Dues. Membership dues shall be \$12.00 per year, payable on or before the first (1st) day of January of each year. Persons joining mid-year pay that persentage of the dues which cover the remainder of the year.

No member may vote whose dues are not paid for

the current year.

The amount paid for membership dues shall be reviewed each October (or at the request of the Treasurer) by the Board. Proposed changes shall be voted upon by ballot of the membership. Dues shall be set such that S*P*A*C*E need not rely on donations of materials or services to fund its regular activities.

Section 3. Obtaining Membership. Each applicant for membership shall apply on a form as approved by the Board and which shall provide that the applicant agrees to abide by these Bylaws and Constitution. Upon payment of the prorated dues, s/he becomes a member in good standing. Each membership carries one vote.

Section 4. Termination of membership Memberships may be terminated:

- (a) by resignation. Any member may resign from the club upon written notice to the Corresponding Secretary, but no portion of dues will be refunded.
- (b) by lapsing. A membership will be considered as lapsed and automatically terminated if the dues are not paid 60 days after the first day of the fiscal year. In no case shall a person be entitled to vote at any club meeting whose dues are unpaid as of that meeting.
- (c) by expulsion. A membership may be terminated by expulsion as provided in Article VI of these Bylaws.

ARTICLE II - Meetings and Voting

Section 1. Club Meetings. Meetings of the club shall be held in a central location on the First Saturday of the month, at a time and place designated by the Board.

Section 2. Special Club Meetings. Special club meeting may be called by the President or a majority of the members of the Board. Written notice of the time, date, location, and subject of said special meeting shall be mailed by the Corresponding Secretary at least 5 and not more than 15 days prior to the meeting. No other club business can be transacted thereat.

Section 3. Board Meetings. Meetings of the Board of Directors shall be held the first Saturday of each month prior to the Club meeting. A quorum for such a meeting shall be two-thirds of the Board.

Section 4. Special Board MeetingS. Special meetings of the Board may be called by the President. Written notice of the time, place,

date, and purpose of the meeting shall be sent out by the Corresponding Secretary at least 5 and not more than 15 days prior to said meeting. No other business shall be transacted thereat. A quorum shall be two-thirds of the Board.

Section 5. Voting. Each member in good standing whose dues are paid for the current year shall be entitled to one vote. No proxy voting will be allowed.

ARTICLE III - Directors, Sub-groups and Officers

Section 1. Board of Directors. The Board shall be comprised of the President, Vice-president, Recording Secretary, Corresponding Secretary, Treasurer, Librarian, Program Chairman, Newsletter Editor and the elected representative from each sub-group, all of whom shall be elected for one-year terms annually as provided in Article IV and shall serve until their successors are elected. General management of the Club's affairs shall be entrusted to the Board, and they each are empowered to get mail from the Club's F.O. Box and forward it to the Corresponding Secretary.

Section 2. Sub-groups. Whenever groups of S*P*A*C*E members wish to meet regularly at other than the specified time and date for Club Meetings, they may do so by meeting the following conditions:

- (a) They must elect a representative and an alternate to the Board of Directors, one of which must attend every Board meeting.
- (b) They must submit a record of the contents of the meetings to the Newsletter Editor for inclusion.

Section 3. Officers.

- (a) The President shall preside at all meetings of the club and of the Board, and shall have the powers and duties normally appurtenant to the office of President in addition to those specified in the Bylaws.
- (b) The Vice-President shall have the duties and exercise the powers of the president in case of the Presidents death, absence, or incapacity.
- (c) The Recording Secretary shall keep a record of all meetings of the club and Board and of all matters of which a record shall be ordered by the Board and submit a synopsis of club meetings to the Newsletter Editor.
 - (d) The Corresponding Secretary shall have

charge of the correspondence, notify members of special meetings, keep a roll of the members of the club with their addresses, and carry out such other duties as are prescribed in these Bylaws.

- (e) The offices of Recording and Corresponding Secretaries may be held by the same person.
- (f) The Treasurer shall collect or receive all moneys due or belonging to the club. He shall deposit the same in a bank designated by the Board in a dual signature account, in the club's name. Bank statements shall be posted directly to the Treasurer. His books shall at all times be open to inspection of the Board, and he shall report to them at every meeting the condition of the club's finances. At the annual meeting he shall render an account of all moneys received and expended during the previous fiscal year. Each January, the past Treasurer, current Treasurer, and another Board member (or two in the event of a re-election) shall audit the Club's Books.
- (g) The Librarian shall hold for the Club all Disks, magazines, Newsletters, books or other items of interest to the membership in such a manner as to make them available to the membership and will head the committee set by the Board to review all material which may be included on Club Disks. His committee is charged with seeing that no copyrighted material is reproduced by the club and that every program distributed carries remark statements as to its origin, documentation of public domain, the names of the screeners and the date screened.
- (h) The program Chairperson shall attempt to provide demonstrations of techniques or equipment of interest to the membership at each main group meeting.
- (i) The Newsletter Editor shall be responsible for seeing that the Messages from S*P*A*C*E is created and mailed after the main meeting each month, that the Secretaries and sub-groups know the date by which their reports must be received, and turn monies for advertising in the Newsletter over to the Treasurer. S/he may work alone or with a committee as approved by the Board.
- Section 3. Vacancies. Any vacancies occurring during the year on the Board shall be filled for the unexpired term of office by a majority vote of all of the then members of the Board at its first regular meeting following the creation of the vacancy, or at a special meeting called therefore.

ARTICLE IV - The Club Year, Annual Meeting, Elections

Section 1. Club Year. The Club's fiscal year shall begin on the First day of January and end on the 31st day of December. The clubs official year shall begin at the first main meeting of the year and run until the next January main meeting.

Section 2. Annual Meeting. The annual meeting shall take place in December at which nominated candidates will be presented to the membership.

Section 3. Elections. For each position, the nominated candidate receiving the most votes in a secret ballot of the membership in good standing sent out by the Corresponding Secretary or through the Newsletter the first week of December and returned before December 31st shall be declared elected.

Section 4. Nominations. No person may be nominated in a club election who does not own an Atari Computer. During the month of September the Board shall select a nominating committee of at least three members not more than one of whom shall be a member of the Board. The Board shall name a chairman for this committee which will meet before October 1st to:

- (a) Nominate at least one person for each position on the Board except sub-group reps. After securing the consent of the nominated candidates in writing, their names shall be reported in writing to the Corresponding Secretary.
- (b) The candidates so nominated will be presented at the October main meeting and in the October Newsletter.
- (c) Additional nominations may be made at the November Main meeting by any member in attendance, providing that the person so nominated does not decline. No person can be a candidate for more than one position.
- (d) Nominations cannot be made in any manner other than as provided in this section.

ARTICLE V - Committees

Section 1. The Board may each year appoint standing committees to advance the work of the club in such matters as have been approved by the membership in a ballot vote mailed with the Newsletter and returned in good order within 30

days.

Section 2. Any committee appointment may be terminated by a majority vote of the full membership of the Board upon written notice to the appointee; and the Board may appoint successors to those persons whose services have been terminated.

ARTICLE VI - Discipline

Section 1. Conviction of copyright infringement. Any club member convicted of knowingly selling or reproducing copyrighted diskettes for other than personal back-up use will be expelled from membership in the club.

Section 2. Expulsion of a member is automatic at the time final court judgement is made. The member will be notified of the expulsion by the Corresponding Secretary. No portion of dues will be refunded.

ARTICLE VII - Amendments

Section 1. Amendments to the Constitution and Bylaws may be proposed by Board or by written petition addressed to the Recording Secretary signed by 20% of the membership in good standing. Amendments proposed by such petition shall be promptly considered by the Board and must be submitted to the members with recommendations of the Board by the Recording Secretary for a ballot by mail or in the Newsletter within three months of the date when the petition was received by the Recording Secretary.

Section 2. The Constitution and Bylaws may be amended by a two-thirds majority of the ballots returned within 30 days to the Recording Secretary.

ARTICLE VIII - Dissolution

Section 1. Dissolution. The club may be dissolved at any time by written consent of not less than two-thirds of the members in good standing. In the event of the dissolution of the Club whether voluntary or involuntary or byoperation of law, none of the property of the Club shall be distributed to any member or members of the Club, but after payment of all of the debts of the Club its, property and assets shall be given to the Superintendent of Washington State Public Instruction for the benefit of student computer literacy.

ARTICLE IX - Order of Business

Section 1. At meetings of the Club, the order of business, so far as the nature and character of the meeting may permit, shall be as follows:

Call to order
Minutes of the last meeting
Report of the President
Reports of the Secretaries
Report of the Treasurer
Report of the Librarian
Reports of Committees
Report of the Program Chairperson
Unfinished business
New Business
Any planned Demonstrations
Adjournment

In absence of any other set procedures, Robert's Rules of Order will be observed. Except as otherwise specified, a simple majority vote or ballot will carry.

Section 2. At meetings of the Board, the order of business, unless otherwise directed by majority vote of those present, shall be as follows:

Reading of the minutes of the last meeting Report of the Secretaries Report of the Treasurer Report of the Librarian Report of the Program Chairperson Report of the Newsletter Editor Reports of the Committees Unfinished Business New Business Adjournment

ARTICLE X - Treasury

Section 1. Normal Operating Expense. Normal operating expenses shall be budgeted by the Board for the Club's support. Such costs as P.O. Box rent, a set amount for publishing the newsletter, and other items as approved by majority vote of the Board shall be paid by the Treasurer as needed.

Section 2. Other Expenditures. Costs beyond those budgeted or expenditures made for the benefit of the membershipshall be submitted to the Board through the Corresponding Secretary along with the receipts for Board approval before the Treasurer may make payment.

Submitted by the Bylaw Committee:
Brad Reed
Cliff Boyce
Ray Hinote
Tom Newman
Tom Wood
Kathy Bergh, Chairperson

BYLAWS

& TLINS

PT TAKE

BYLAWS

BYLAWS

Letter to the Editor (Paul de Anguera is editor of STARBASE LOG)

Dear Jerry,

I have been thinking about the Atari Conference S*P*A*C*E is planning. Since you have committed yourself in writing (in your November issue), I have become excited about the idea. I have also become apprehensive about how it will turn out. All this talk of "booths"... is this going to be just another trade show?

I have been to quite a few computer fairs, and am always discouraged by the frank commercialism of these events. Now I wonder if the Atari Conference will be an imitation of such a fair? Shall we all set up card tables and signs, and try to collect money and prestiege from each other?

The one thing I never get enough of at a computer fair is information. I don't mean colored brochures and business cards. I mean techniques I can use; answers to my questions; help with my problems. I would also like to share what techniques, answers and help I have with other people at the conference.

I remember such transfers of expertise and skill at computer fairs quite vividly, because they are so rare. People at booths don't usually have a conference room handy; nor would their mastery of the subject justify one. I once encountered a beautiful woman representing a manufacturer of flatbed plotters who had no idea what the machines were for!

To be a success from my point of view, the Atari Conference will have to be more than a few rows of booths surrounded by crowds. I want to see discussions, seminars, and classes (I am not being redundant, they are all different). This will only be possible if rooms large enough for 15 or 20 people to sit down in are provided; and if the events are scheduled and publicized in advance.

Here are some topics which I think would help meet the need for information at the conference:

<u>NEW USERS</u>: Why buy a microcomputer? What is so special about Atari'computers? Are they good for anything besides playing games and programming? How hard would it be to learn BASIC? (How soon we forget that we were once beginners, anxious for advice and help!)

<u>OLD USERS</u>: How do you interface machine-code with with BASIC? What maintenance can a user perform on his own computer, and how? Give a

blow-by-blow description of an AUTORUN.SYS file; player/missile graphics initialization and shutdown; fine scrolling; interrupt programming. Provide hands-on demos of serious software, including programming tools: Offer an open discussion of communication protocol problems with other computers.

<u>USER GROUP OFFICERS</u>: How are the treasuries being set up and reported on? What does the copyright law permit? Have any groups undertaken team programming projects or performed community services? How about bylaws and incorperations?

Maybe S*P*A*C*E had intended to present just this sort of conference all along. If so, then I apologize for presuming otherwise. In any event, I hope these ideas will be of some use use to you in planning the conference.

Sincerely,
Paul de Anguera
Member, SPACE and STARBASE

* * * *

Thanks for the comments, Paul, and rest assured, we don't want this to be "just another trade show" either. See the article elsewhere in this issue. -ed.

Tacoma Meeting Notes by Kathy Bergh

11-13-82

We looked at the Synapse Demo Disk and were mostly impressed.

Jim Chapman reviewed the main meeting.

Chuck showed us Enhancements to Graph It from APX. Menu driven from a diskette, it allows you to save or retrieve bar graphs, pie charts, or 3d plots. Using the joystick, you can place the cursor on a charted point and learn the X, Y, and 7 values.

Phil Bergh demoed APX's Ultimate Remumber Utility (\$22.95). Default renumbers by 10, but you can set your own parameter flags. It is fast! The program sets safety flags, and if you run a program which needs part of the space on p. 6 which the REN. takes, it erases itself. Use it by typing REN. One slight bug: If you use TRAP 40000 (a line number too big to be legal) you get a garbage answer.

Tom Neitzell talked about Analog #8 - Four color graphics in GR.0 with redefined character set with excellent explanations of how it do it.

Tom also physically destroyed two disks using the compacter utility on the S*P*A*C*E Utilities disk by trying to compact a VERY large program. Don't use it on a program with imbeded remark statements (10 GOTO 120):

REM DON'T DO THIS) because another line may be shoved on behind it and disappear from the useful program. Also, don't use line numbers 0 - 9 as they are overlayed by the utility.

11-27-82

Tom Newman demoed Micro Painter, a fantastic tool for drawing and filling areas using four changeable colors and solid, horizontal or vertical stripes, or checkerboard color patterns. The artwork with his programs in the last two S*P*A*C*E Newsletters show how elaborate the drawing can be,

Tom Neitzell brought in Instedit from APX (\$22.95) a very powerful character set generator which will twist, roll, scroll or mirror your creation and display it in all modes on the main screen, so that you can see what you are creating.

It has a problem if you have a fast chip, and Tom recommends the following as working with either chip:

Line 360 was: SOUND KO, KO, KO, KO: B=(138-HP)/K4:B=INT(K2^B)+K1-(B=K7): etc.

It would be better as:

360 SOUND KO,KO,KO,KO;B=(138-HP)/K4; B=INT(K2^B+K1/K10);L=(UP-K20)/K4;L=M+L

This is needed because the fast chip is more accurate in performing exponentiation. The original statement compensated for errors in the old chip, the fix is good for both.

Brad Reed (back for a visit from WSU) showed us his homemade 400 keyboardcomplete with a numeric keypad - a lot easier on typists!

We watched a GR.10 Waterfall from Byte.

We also listened to the Star Wars Theme, downloaded from A.C.E., demoed by Jim Chapman. Jim picked this up at the previous Kent meeting - I guess Jim is trying to get his phone bill under control.

After the meeting, those interested in writing Bylaws (who could find us) worked long and hard. My thanks to Cliff Boyce, Brad Reed, Tom Wood,

Tom Newman and Ray Hinote for their labors and to all of you who found me and made suggestions; those which the committee approved are in the submitted draft. Some of the ideas were discarded as being physically impossible and illegal in 27 States.

REPORT FROM THE COMMITTEE

The Atari Conference committee met at VIPS in Kent on December 9, 1982. Shannon Tunnard acted as de-facto chairperson.

The first meeting discussed ways and means to set up the conference and came to some conclusion about budgetting. Thank to excellent input from Dan Flanagan, we were able to set up a tentative cost base for running the conference. We discussed who we would like to see at the conference and charges.

It was determined to charge dealers and distributors a booth rental fee of \$50.00 and an entrance fee of \$2.00 for adults and \$1.00 for students.

The fair is tentatively scheduled for the last weekend in March, and it will probably be held in three of the Northwest Rooms at the Seattle Center. We hope to have Atari attend, and also would appreciate seeing Bill Wilkinson of Optimized Systems Software.

At our next meeting, we'll get together at Creative Computers in Kent, and go to Shannon Tunnard's house for the meeting. This will be held Dec. 30. at 7:00.

Conference Comments

We are going to need beaucoup dollars to get this conference started. On discussing this with Tom Newman, we came to the consensus that our dues should be collected as quickly as possible, and also monies from the club disks should be applied to the rental of the rooms.

Dues are due now, and are \$12.00 per year once again. Interestingly, many groups are charging \$15.00 per year if you pay before January, and \$20.00 thereafter. So, what a deal!

The three Northwest Rooms cost approximately \$500.00 per day, and we can easily recoup the initial outlay, plus. One of several advantages to having the conference at the Seattle Center is that they supply chairs, tables, sound equipment etc., as part of the rental package.

PIAZZA

This BASIC game is a graphics hunt for a mad bomber in a big hotel. You must guess where he has hidden the bomb before it blows up.

The game was given to me with no credit as to whom the author might be, but it is fun and will make you crazy.

As usual, all characters inside brackets (e.g. [& 1) are inverse video.

10 TI=1000:HD=4000:CS=5000:PG=6000 :CA=7000:CL=8000:CO=9000:EX=10000 15 RIGHT=8100:LEFT=8200:UP=8300: DOWN=8400;W=11200;WW=11200;WWW=11000 :DIM RATE\$(30) 20 OPEN #2,4,0,"K!" 100 GOSUB TI 400 GOSUB HO 500 GOSUB CS 600 GOSUB PG 700 GOSUB CA 990 GOTO 600 1000 REM ** TITLE GRAPHIC ** 1010 GRAPHICS 2+16 1020 COLOR 1:POSITION 4,5:? #6;"PIAZZA HOTEL" 1200 FOR U=1 TO 5:FOR X=2 TO 18 1210 COLOR 2:SETCOLOR 1,4,14:POSITION X,3:? #6;CHR\$(270):POSITION 20-X,7:? #6;CHR\$(270) 1220 COLOR 1: POSITION X,3:? #6;CHR\$(142):POSITION 20-X,7:? #6;CHR\$(142) 1230 FOR Z=1 TO SINEXT ZINEXT X 1310 FOR ZZ=4 TO 4:COLOR 2:SETCOLOR 1,0,14:POSITION 2,10-ZZ:? #6;CHR\$(270):POSITION 18,ZZ:? #6;CHR\$(270) 1320 COLOR 1: POSITION 2,10-ZZ:? #6; CHR\$(142); POSITION 18, ZZ;? #6;CHR#(142):FOR Z=1 TO 16:NEXT Z:NEXT ZZ 1330 NEXT U 1999 RETURN 4000 REM ** DRAW HOTEL ** 4010 GRAPHICS 7:COLOR 1:D=INT(RND(0)*15)+1:IF D=3 OR D=4 OR D=5 THEN GOTO 4010 4020 FOR X=0 TO 77 STEP 12 4030 C=C+1:IF C=4 THEN C=1 4040 SETCOLOR 0,D,6:SETCOLOR 1,D,10 :SETCOLOR 2.D.2 4100 PLOT 145,10+X:DRAWTO 145,0+X :DRAWTO

13,0+X:POSITION 13,10+X

4305 FOR X=2 TO 145 STEP 143

4300 REM ** DRAW FLOOR NUMBERS **

4310 COLOR 1:PLOT 6+X,74:DRAWTO 6+X,78

4110 POKE 765,C 4120 XIO 18,#6,0,0,"S:"

4130 NEXT X

7+X,41:PLOT 7+X,39:DRAWTO 7+X,43 4330 PLOT 5+X,2:DRAWTO 7+X,Z:DRAWTO 7+X,6 4340 COLOR 3:PLOT 5+X,63:DRAWTO 7+X,63:DRAWTO 7+X,65:DRAWTO 5+X,65:DRAWTO 5+X,67:DRAWTO 7+X,67 4350 PLOT 7+X,26:DRAWTO 5+X,26:DRAWTO 5+X,28:DRAWTO 7+X,28:DRAWTO 7+X,30:DRAWTO 5+X,30 4360 COLOR 2:PLOT 5+X,51:DRAWTO 7+X,51:DRAWTO 7+X,55:DRAWTO 5+X,55:PLOT 5+X,53:DRAWTO 7+X,53 4370 PLOT 5+X,14:DRAWTO 5+X,18:DRAWTO 7+X,18:DRAWTO 7+X,16:DRAWTO 5+X,16 4372 NEXT X 4375 REM ** DIVIDE ROOMS ** 4380 FOR Y=15 TO 143 STEP 15 4390 COLOR 0:PLOT 12+Y,0:DRAWTO 12+Y,79 4395 NEXT Y 4400 REM ** ROOM NUMBERS ** 4410 POKE 752,1 4420 POKE 656,0:POKE 657,3:? " 1 2 3 4 5 4430 POKE 656,1:POKE 657,1:? "[PIAZZA HOTEL FIAZZA HOTEL PIAZZA HOTEL1" 4999 RETURN 5000 REM ** COMPUTER SELECTION ** 5100 COFL=INT(RND(0)*7)+1 :CORM=INT(RND(0)*9)+15200 BOOM=INT(RND(0)*5)+2 5300 EXPL=0:GUESS=0 5400 RETURN 6000 REM ** PLAYER GUESS ** 6010 GOSUB WW:POKE 656,3:POKE 657,2:? " 6100 POKE 656,3:POKE 657,3:SOUND 0,1,6,12:GOSUB W:SOUND 0,0,0,0:? "WHICH FLOOR ?"; 6110 GET #2,FL:IF FL<49 OR FL>55 THEN SOUND 0,20,6,12:GOSUB W:SOUND 0,0,0,0:GOTO 6010 6115 PLFL=FL-48 6117 POKE 656,3:POKE 657,19:? " 6120 SOUND 0,3,6,12:GOSUB W:SOUND 0,0,0,0:POKE 656,3:POKE 657,17:? PLFL;" WHICH ROOM ?"; 6130 GET #2,RM:IF RM<49 OR RM>57 THEN SOUND 0,20,6,12:GOSUB W:SOUND 0,0,0,0:GOTO 6117 6140 PLRM=RM-48:SOUND 0,2,6,12:GOSUB W:SOUND 0,0,0,0:POKE 656,3:POKE 657,34:? PLRM::GOSUE WW 6999 RETURN 7000 REM ** CLUE CALCULATION ** 7100 EXPL=EXPL+1:GUESS=GUESS+1:IF EXPL=BOOM THEN GOSUB EX 7150 FLC=COFL-PLFL:RMC=CORM-PLRM 7200 IF FLC=0.AND RMC=0 THEN GOSUB CO:RETURN 7250 IF FLC=0 AND RMC>0 THEN GOSUB 4320 PLOT 5+X,39:DRAWTO 5+X,41:DRAWTO RIGHT:RETURN

7300 IF FLC=0 AND RMC<0 THEN GOSUB 9330 POKE 656,1:POKE 657,8:? "YOU HAVE LEFTIRETURN SAVED ";GUESTS;" GUESTS"; 9340 IF GUESS=1 OR GUESS=2 THEN RATE\$="[7350 IF FLC>0 AND RMC=0 THEN GOSUB UPRETURN SUPER SLEUTH J" 9344 IF GUESS=3 THEN RATE\$="[MASTER 7400 IF FLC>0 AND RMC>0 THEN GOSUB RIGHT:GOSUB UP:RETURN DETECTIVE 1" 7450 IF FLC>0 AND RMC<0 THEN GOSUB 9346 IF GUESS=4 THEN RATE\$="[DETECTIVE LEFT:GOSUB UP:RETURN CLASS-A1" 7500 IF FLC(0 AND RMC=0 THEN GOSUB 9348 IF GUESS=5 THEN DOWN: RETURN RATE\$="[DETECTIVE-CLASS-B]" 7550 IF FLC(0 AND RMC)0 THEN GOSUB 9350 IF GUESS>5 THEN RATE\$="[GUM--SHOE]" RIGHT:GOSUB DOWN:RETURN 9360 POKE 656,2:POKE 657,2:? "YOUR RATING 7600 IF FLC(0 AND RMC(0 THEN GOSUB IS... "::? RATE\$; 9400 POKE 656,3:POKE 657,3:? "Press any key LEFT:GOSUB DOWN:RETURN 7999 RETURN for another game ... "; 8000 REM ** PRINTED CLUES ** 9410 GET #2,AGAIN:GOTO 400 8100 REM ** RIGHT ** 10000 REM ** EXPLOSION ** 8105 H=(PLRM*15)+5:V=89-(12*PLFL):GOSUB 8500 10090 H=(CORM*15)+5:V=90-(12*COFL) 8110 COLOR O:PLOT H,V:DRAWTO H+6,V 10100 FOR Z=-2 TO 2:COLOR 0:PLOT 8120 PLOT H+4,V+2:DRAWTO H+6,V:DRAWTO H-2,V+Z:DRAWTO H+2,V+Z:NEXT : 10110 PLOT H-1,V-3:DRAWTO H+1,V-3:PLOT H+4,V-28130 H=0:V=0:RETURN H-1,V-5:DRAWTO H+1,V-5:PLOT H,V-4:DRAWTO H,V-3 3200 REM ** LEFT ** 8205 H=(PLRM*15)+4:V=89-(12*PLFL):GOSUB 8500 1 0 2 0 0 GOSUB W:SOUND 8210 COLOR O:PLOT H,V:DRAWTO H-6,V 2,75,8,15:V1=15:V2=15:V3=15:FLASH=2 8220 PLOT H-4,V-2:DRAWTO H-6,V:DRAWTO 10210 SOUND 0,20,8,V1:SOUND 1,40,8,V2:SOUND H-4,V+2 8230 H=0:V=0:RETURN 10220 COLOR O:SETCOLOR 8300 REM ** UP ** 4,4,FLASH:B=INT(RND(0)*H)+1 8305 H=(PLRM*15)+4:V=89-(12*PLFL):GOSUB 8500 G=INT(RND(0)*V)+1;J=INT(RND(0)*H)+18310 COLOR O:PLOT H,V:DRAWTO H,V-5 :F=INT(RND(0)*V)+18320 PLOT H-2,V-3:DRAWTO H,V-5:DRAWTO 10225 FLASH=FLASH+12:IF FLASH>14 THEN H+2,V-3 FLASH=2 10226 IF H+B>158 THEN B=0 8330 H=0:V=0:RETURN 8400 REM ** DOWN ** 10227 IF V-G<0 THEN G=0 8405 H=(PLRM*15)+4:V=89-(12*PLFL):GOSUB 8500 10228 IF V-F<0 THEN F=0 8410 COLOR O:PLOT H,V:DRAWTO H,V+5 10229 IF H-J<0 THEN C=0 8420 PLOT H-2,V+3:DRAWTO H,V+5:DRAWTO 10230 PLOT H,V+2:DRAWTO H+B,V+2-G:PLOT H+2.V+3 H,V+2:DRAWTO H-J,V+2-F 8430 H=0:V=0:RETURN 10250 V1=V1*0.91:V2=V2*0.95:V3=V3*0.97:IF 8500 FOR M=1 TO 7 V3>3.2 THEN 10210 8510 SOUND 0,40+(M*10),10,12 10270 SOUND 0,0,0,0:SOUND 1,0,0,0:SOUND 8520 NEXT MISOUND 0,0,0,0 RETURN 2,0,0,0 9000 REM ** CORRECT ROUTINE ** 10300 POKE 752.1 9010 H=(CORM*15)+5:V=90-(12*COFL) 10310 IF COFL=PLFL AND CORM=PLRM THEN 9100 FOR Z=-2 TO 2:COLOR 0:PLOT GOSUB 12000:GOTO 10330 H-2,V+Z:DRAWTO H+2,V+Z:NEXT Z 10320 POKE 656,0:POKE 657,0:? "[TOO PAD!---- TOO LATE! 9110 PLOT H-1, V-3: DRAWTO H+1, V-3: PLOT 711 H-1,V-5:DRAWTO H+1,V-5:PLOT H,V-5:DRAWTO 10330 POKE 656,1:POKE 657,0:? " YOU ARE H,V-3NOW A DETECTIVE IN THAT BIG " 9200 FOR Z=1 TO 8 10340 POKE 656,2:POKE 657,0:? " HOTEL IN 9220 SETCOLOR 4,0,14:SOUND 0,50,10,12:GOSUB THE SKY.TO RETURN TO EARTH ": WW:SETCOLOR 4,0,0:SOUND 0,150,10,12:GOSUB 10350 POKE 656,3:POKE 657,0:? " WW ANOTHER GAME PRESS ANY KEY ... "; 9230 NEXT Z:SOUND 0,0,0,0 10400 GET #2,Q:GOTO 400 9300 FOR Z=0 TO 3:POKE 656,Z:POKE 657,1:? " 11000 FOR M=1 TO 100:NEXT M ";:NEXT Z 11100 FOR M=1 TO 50:NEXT M 9310 POKE 752,1:POKE 656,0:POKE 657,1:? "[11200 FOR M=1 TO 50:NEXT M:RETURN CONGRATULATIONS!]"; 12000 POKE 656,0:POKE 657,0:? "[RIGHT 9320 GUESTS=INT(RND(0)*100)+(600-GUESS*100) ROOM -JUST TOO LATE- TOO BAD! 1":RETURN

ELECTIONS

At the December 4 meeting nominations were held for the various offices of S*P*A*C*E. Following are the people nominated for various offices.

PRESIDENT:

Tom Newman

Jim Davis

Cliff Boyce

VICE PRESIDENT:

Lloyd Ollmann Jr.(*)

Jim Chapman

SECRETARY:

Jerry Wright

TREASURER:

Mike Smyth

LIBRARIAN CHAIRMAN:

George Ferris

EDITOR:

Kathy Bergh

PROGRAM CHAIRMAN:

Bruce Chapman

(*)Note: Lloyd stated that he wished to serve as V.P. only if Tom N. was elected as President, so Tom and Lloyd are a package deal.

Follow Detroit Rules

VOTE ENELLY

* * * Munaky's Law * * *

The program for this issue of the newsletter will allow you to paint a program listing with the control characters painted. It will also allow you to paint out files created and formatted by the Atani word processor. It is written in Basic A+ and requires on theory painter with GRAFTRAXetus.

The dot graphics mode of the Epson allows you to paint the ATASCII bit pattern as a now of ventical dots, with a dot for every binary one and nothing painted for every zero. It lays out one line of 8 dots ventically and then lays down the next column night next to the first, moving from left to night. This is great, but the 8 bytes that define each Atani character are laid out horizontally. This program takes each characters 8 horizontal bytes and strips the bits off in a ventical direction and stores them in a string where they are accessed later by the program. This is done in lines 80 to 160.

The Epson seems to have a packles painting the dot pattern for ATASCII 155 (The and of line character), so it is changed to a 181 at line \$40. The only character in the normal character set that contains a 155 in its dot pattern is inverse Uppercase A, so this is the only one that is slightly different from the original when painted out.

I had to waite a short assembly language subsoutine to 'exclusive or' (60R) the characters to get the inverse dot pattern. This is also done at line 540.

To use this utility you must have the program you want to paint out listed in ATASCII form as a filespee on a distracte. Then oun this program, and type in the Review and filespee (BI:Hame.Etc) of the program you want printed.

I would asiset the compassed mode for most listings. That is the mode that made this anticle and listing. The 38 and 52 column length make Listings Son projessional looking negotations. The 114 length is about maximum for on 8 1/2 by 11 sheet of paper. The length of line feed should be 7,11, on 12 for text or listings, and 8 when easating a picture using control characters. You should have translation on when painting an anticle on letter made with the Atani word processon. Transation on deletes all control This esticle uses a sadifined chanectens. chanacten set casated with fontedit and typed in and formatted with the Atani Hond Processon. To paint out with a different character set, you must have it in place in memony hedone you num this sactos.

The ATASCII values of the subscutine at line 540 ans: 104, 104, 104, 73, 255, 123, 212, 167, 0, 133, 213, 16.

James Murphy
Panama Canal ATARI Computer Users' Group

18 REM * COMLIST.BAA BY JAMES MURPHY *
28 CHBAS=PEEK(756)*256
38 GRAPHICS 8:SFTCOLOR 4,9,4:SETCOLOR 2,9,2:POKE 83,
39:POKE 82,1:POKE 752,1
48 GOSUB 668

50 ? :? "INITIALIZING...Screen will go blank":? "for about three minutes!" 60 FOR CHT=1 TO 1500: NEXT CHT 70 DIM BIT (7), A\$ (1024), B\$ (8), C\$ (4), D\$ (6), DI\$ (15), SEE \$(1200), BUF\$(120), YM\$(1):AMT=8:B\$=" ": POKE 55 9,8 88 MOVE CHBAS+ANT, ADR(B\$).8 98 MASK=128:FOR SEG=8 TO 7:FOR CMT=8 TO 7 100 BIT (CNT) = (ASC (B\$ (CNT+1, CNT+1)) &MASK) 0) : NEXT CNT 110 MASK=MASK/2:MSK=1:BYTE=0:FOR CNT=7 TO 0 STEP -1 120 IF BIT (CNT) THEN BYTE=BYTE+MSK 138 MSK=MSK*2: MEXT CMT 140 A\$ (SEG+1+AMT, SEG+1+AMT) = CHR\$ (BYTE) : NEXT SEG 158 IF AMT=1916 THEM 178 168 AMT=AMT+8: COTO 88 179 POKE 559,34:POKE 752,8 188 GOSUB 668 190 ? : INPUT "Compressed or Mide letters (C-H3)>", Y NS:IF YNS ()"C" AND YNS (>"W" THEN 190 200 CS="EL ": IF YMS="H" THEN CS="EK 218 ? :? "Column length?":? :? "38-52-114 are recomm ended lengths.":? 220 TRAP 210: INPUT "Enter column length (5 TO 120) } >", INC: IF INC (5 OR INC) 128 OR INC () INT (INC) THEN 228 238 TRAP 238:? :? "Length of line feed in 72nd's of inch.":? : IMPUT "Enter length (8-9-11-12) >>", LF 240 IF LF(8 OR LF)12 OR LF=10 OR LF()INT(LF) THEN 23 250 FF=792/LF:D\$="EA &C ":D\$(3,3)=CHR\$(LF):D\$(6)=CHR \$(792/LF) 260 ? :INPUT "Tranlation on? (Y-N) >>", YN\$:IF YN\$()" Y" AND YNS ()"N" THEN 260 276 TR=0: IF YMS="Y" THEM TR=1 280 TRAP 280:? : IMPUT "Enter DEVICE: FILESPEC >>", DI\$ 298 CLOSE #1:0PEN #1,4,0,DI\$:POKE 752,1 300 ? : IMPUT "GPrepare printer! - Hit RETURN", YMS 310 TRAP 610:CLOSE #2:OPEN #2,8,0,"P:":TRAP 560 320 FRM=1:POKE 764,255:? #2;D\$ 330 ? :? "Hit any key to stop printer!":FOR CMT=1 TO 1000: MEXT CHT: POKE 559,8 340 IF PEEK (764) (>255 THEM COTO 628 350 CMT=1:5EG\$="" 360 GET #1, SEG: IF SEG=155 THEN 390 370 IF TR AND (SEC(32 OR (SEC)127 AND SEC(160)) THEN 164 380 SEES (CMT, CMT) = CHR\$ (SEE) : CMT=CMT+1: GOTO 360 390 LN=LEN(SEG\$): IF LN=0 THEN ? #2:GOTO 350 400 AMT=INC 418 IF LN ANT THEN BUFS-SEGS (ANT+1-INC, ANT): GOSUB 44 8: GOTO 438 420 BUF\$=SEG\$ (AMT+1-INC) : GOSUB 440 : GOTO 340 438 AMT=AMT+INC:GOTO 418 440 Z=LEN(BUF\$):Z=Z*8:HI=INT(Z/256):L0=Z-HI*256:C\$(3 , 3) = CHR\$ (LO) : C\$ (4) = CHR\$ (HI) : ? #2; C\$; 450 FOR CNT=1 TO Z/8:INV=0:BYTE=ASC(BUF\$(CNT,CNT)) 468 IF BYTE>127 THEN INU=1:BYTE=BYTE-128 478 IF BYTE>31 AND BYTE (96 THEN BYTE=BYTE-32:60TO 49 488 IF BYTE (32 THEM BYTE=BYTE+64 490 IF INU THEN B\$=A\$(BYTE*8+1,BYTE*8+8):GOTO 530 508 ? #2; A\$ (BYTE*8+1, BYTE*6+6); 510 NEXT CNT:FRM=FRM+1:IF FRM>FF-INT(FF*0.1) THEN ? #2; " ": FRM=1: RETURN 520 ? #2:RETURN 538 FOR X=1 TO 8:Z=ASC(B\$(X,X)) 540 DUMMY=USR CADR ("hhhILTADIV, IIIO") , Z) :IF DUMMY=155 TH EN DUMMY=183 550 PUT #2, DUMMY: NEXT X: COTO 510 560 TRAP 570:? #2;"42\":LPRINT 570 POKE 752,0:POKE 559,34:CLOSE #1:CLOSE #2:IF ERR(9) (>136 THEM ? :? " * ERROR #"; ERR(0);" AT LINE "; ER R(1);" #" 580 POKE 77,8:? : INPUT "Do you want to do another? (Y-N) >>", YNS: IF YNS (>"Y" AND YNS (>"N" THEN 580 590 IF YMS="N" THEN END 618 ? :? "Shere is the printer!": GOTO 388 628 POKE 559,34:POKE 752,8:POKE 764,255:POKE 77,8 638 ? :IMPUT "Gabort or Continue (A-C) >>", YMS:IF YM \$(>"A" AND YN\$(>"C" THEN 620 640 IF YM\$="C" THEN POKE 559,8:POKE 764,255:60TO 358 658 CLOSE #1:CLOSE #2:COTO 588

CONTROL CHARACTER LISTER MARRIER

5 660 ? :? "K

HANDLING DATABASE FILES

By: Bill Dement, PhD PAN+ATARI*NEWS

While working with the various data base programs available for the Atari, I have run into a number of cases where the program is not able to handle an application exactly as required. One option is to write your own program from scratch. This can be a very time consuming option that you may not want to undertake. A second option is to use the data files produced by the data base program and write a short program to manipulate these data as you require. This article will introduce you to the structure of data base files in disk storage and illustrate how easy it is to gain access to the data on these files.

We will be discussing "records" in the data base and the "fields" that make up this record. For example, a record in a mailing list data base may contain the fields: first name, last name, address, city/state, and zip code. When a record is added to a data base the data are entered into a single string variable that is then "PRINTed" to the disk. Data for an individual field is contained in a specific substring of this record string. Now an example to illustrate this.

Assume that our mailing list data base is set up with the following structure:

first name - 10 characters last name - 10 characters address - 15 characters city/state - 15 characters zip code - 5 characters

A record, call it RECORD\$, will be made up of the following substrings:

first name - RECORD\$(1,10)

last name - RECORD\$(11,20)

address - RECORD\$(21,35)

city/state - RECORD\$(36,50)

zip code - RECORD\$(51,55)

Each one of these fields will contain exactly the number of characters assigned to it, e.g. the last name field will contain exactly 10 characters. If your data do not fill the field then the program adds blanks to the remaining positions. These blanks are required to keep each field in the proper substring so that it can be accessed when required.

Records are "PRINTed" in sequence on the disk file. The program below will allow you to examine your data base files. All you need to do is enter the file name with extension when prompted by the program. The most common extensions used by data base programs are ".DAT" (Filemanager BOO and Softside Database II) and ".DB" (APX Data Management System).

MFS PG 14

Some of the program could be used to develop your own application. Line 10 dimensions the string variables used in the program and opens the keyboard for input. Lines 20 and 30 allow you to enter your file name. In your program you can delete these lines if you are working with only one file. Line 40 opens the file for input and initializes a record counter, J. Line 50 inputs the first record into the string RECORDs. At this point you can put in the necessary manipulations of the record. Be sure to close any open channels after all records have been read (line 120). Lines 130 and 140 are error traps for cases where a file is not found on a disk or the last record on a file has been read.

With this basic knowledge of disk file structure you should be in a better position to fully utilize the powerful data base programs currently available.

DATABASE FILE EXAMINER

5 REM ***EXAMINE DATABASE FILES*** 7 REM *** by Bill Dement ***
10 DIM FILENAME\$(12),FILESPEC\$(14),RECORD\$(400),I\$
(1):OPEN \$4,4,0,"K:"
20 TRAP 20:? ")WHICH FILE DO YOU WANT TO EXAMINE": INPUT FILENAMES: TRAP 40000 30 FILESPEC\$="D:":FILESPEC\$(3)=FILENAME\$ 40 TRAP 130: OPEN \$1,4,0,FILESPEC\$: J=0 50 TRAP 140: INPUT \$1; RECORD\$: J=J+1 A=INT(LEN(RECORD\$)/10) ? "]RECORD ";J;": 71 ? :? :? " 1234567890" 72 ? :? "CHARACTERS 01-10: ";RECORD\$(1,10) 75 FOR I=2 TO A:? "CHARACTERS ";(I-1)*10+1;"-";1*1 0;": ";RECORD\$((I-1)*10+1,I*10):NEXT I 77 IF LEN(RECORD\$) = A+10 THEN 80 78 ? "CHARACTERS "; A*10+1; "-"; LEN(RECORD\$); ": "; RE CDRD\$ (A+10+1) 80 ? :? :? "PRESS E TO END.":? "PRESS ANY OTHER KE Y TO CONTINUE. 90 GET #4, B: I\$=CHR\$(B) 100 IF I\$="E" THEN 120 110 GOTO 50 120 CLOSE #1:CLOSE #4:END 130 CLOSE #1:?:? "FILE NOT FOUND":FOR I=1 TO 300: NEXT I:GRAPHICS 0:GOTO 20 140 ? :? ">RECORD "; J; " WAS THE LAST RECORD":? "ON THE FILE. ": FOR I=1 TO 800: NEXT I: GRAPHICS 0: GOTO



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